Treating Tobacco in Smokers with Mental Illness

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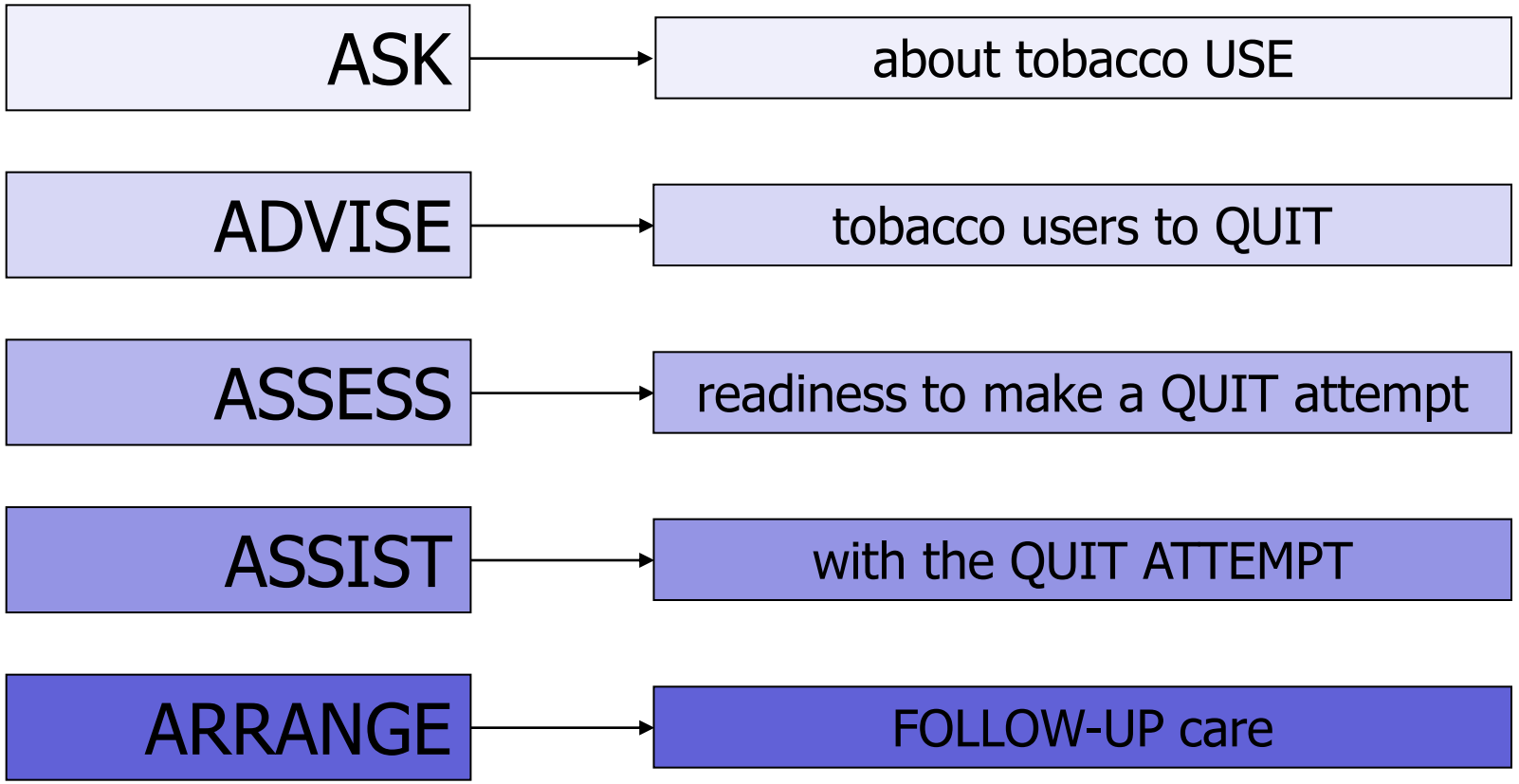
RECOMMENDATIONS to TREAT TOBACCO USE in PSYCHIATRY

In terms of lives saved, quality of life, and cost-efficacy, treating smoking is considered the most important activity a clinician can do.

-- John Hughes, MD
Professor of Psychiatry
University of Vermont

NATIONAL CANCER INSTITUTE'S FIVE A's for TREATING TOBACCO



The FIVE A's: **ASK**

- ❑ Never
- ❑ Former
- ☑ Current

- **ASK** about tobacco use
  - "Do you ever smoke or use any type of tobacco?"
    - "I take time to ask all of my clients about tobacco use—because it's important."

Tobacco use & MH status should be included in the intake assessment and documented for every client.

The FIVE A's: **ADVISE**

- ADVISE tobacco users to quit (clear, strong, personalized, sensitive)
  - "Quitting smoking is the most important thing you can do to protect your health now and in the future."
  - "I have training to help my clients quit, and when you are ready, I can work with you to design a specialized treatment plan."

52% of psychiatric patients who smoke report never having been advised to quit by a mental healthcare provider (Prochaska et al., 2005)

MENTAL HEALTH & ADDICTION TREATMENT PROVIDERS

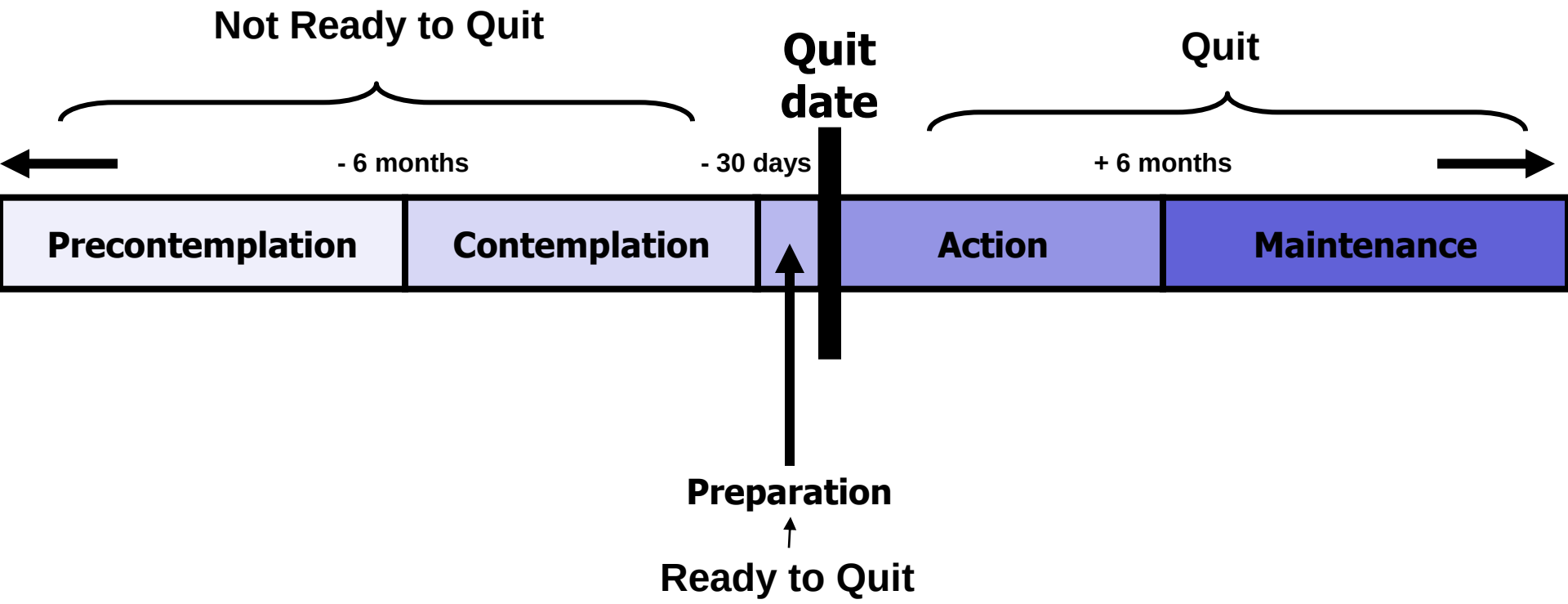
- **Critical to get them on board with treating tobacco:**
  - Know the client well
  - May have discouraged quit attempts in the past
  - Should be aware of changes in tobacco status that may impact psychiatric medication levels
  - Able to identify and address any changes in psychiatric symptoms during the quit attempt

YOUR ROLE

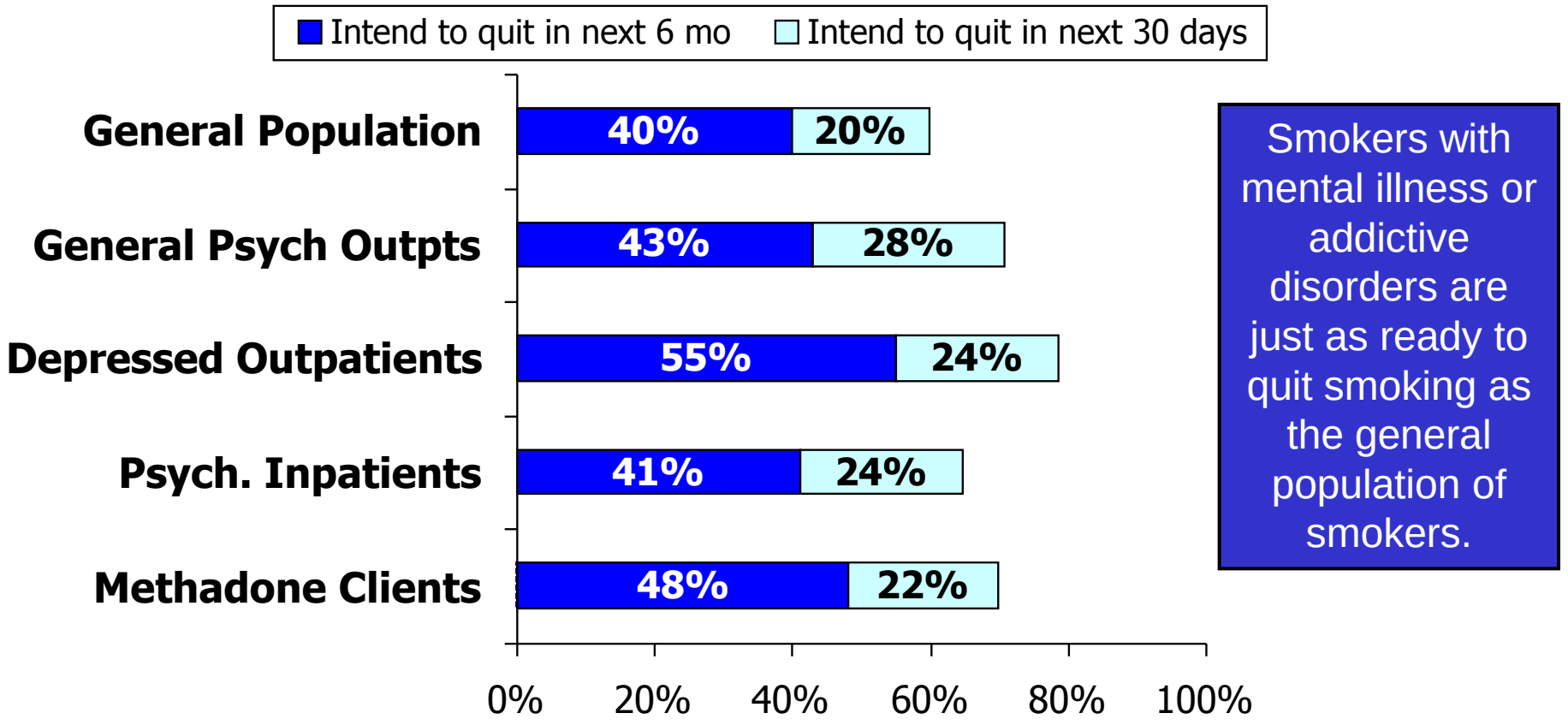
- Listen, share resources, work collaboratively with treatment providers
- Emphasize and respect client confidentiality
- Build upon client's strengths and recovery "tools"

The FIVE A's: **ASSESS**

- **ASSESS** readiness to make a quit attempt



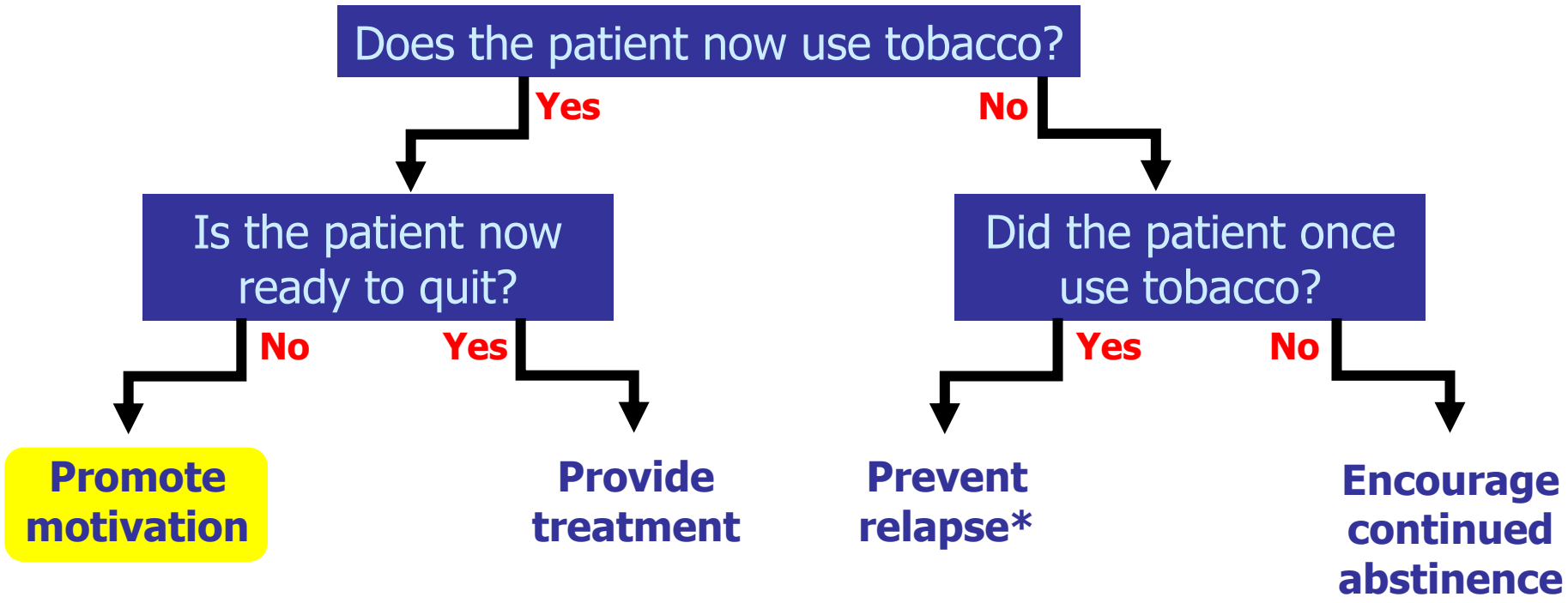
READINESS to QUIT in SPECIAL POPULATIONS*



Smokers with mental illness or addictive disorders are just as ready to quit smoking as the general population of smokers.

*** No relationship between psychiatric symptom severity and readiness to quit**

ASSIST: TAILOR TREATMENT to PATIENTS' READINESS to QUIT



*Relapse prevention interventions not necessary if patient has not used tobacco for many years and is not at risk for re-initiation.

Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update.*

NOT READY to QUIT: Counseling Strategies

DO

- Strongly advise to quit
- Provide information
- Ask noninvasive questions; identify reasons for tobacco use
- Raise awareness of health consequences/concerns
- Demonstrate empathy, foster communication
- Leave decision up to patient

DON'T

- Persuade
- "Cheerlead"
- Tell patient how bad tobacco is, in a judgmental manner
- Provide a treatment plan

NOT READY to QUIT: Counseling Strategies (cont' d)

Consider asking:

"On a scale from 1 to 10, how important is it to you to quit smoking?"

"On a scale from 1 to 10, how confident are you that you could quit smoking right now?"

NOT READY to QUIT: Counseling Strategies (cont'd)

The 5 R's—Methods for enhancing motivation:

- Relevance
- Risks
- Rewards
- Roadblocks
- Repetition

Tailored, motivational messages

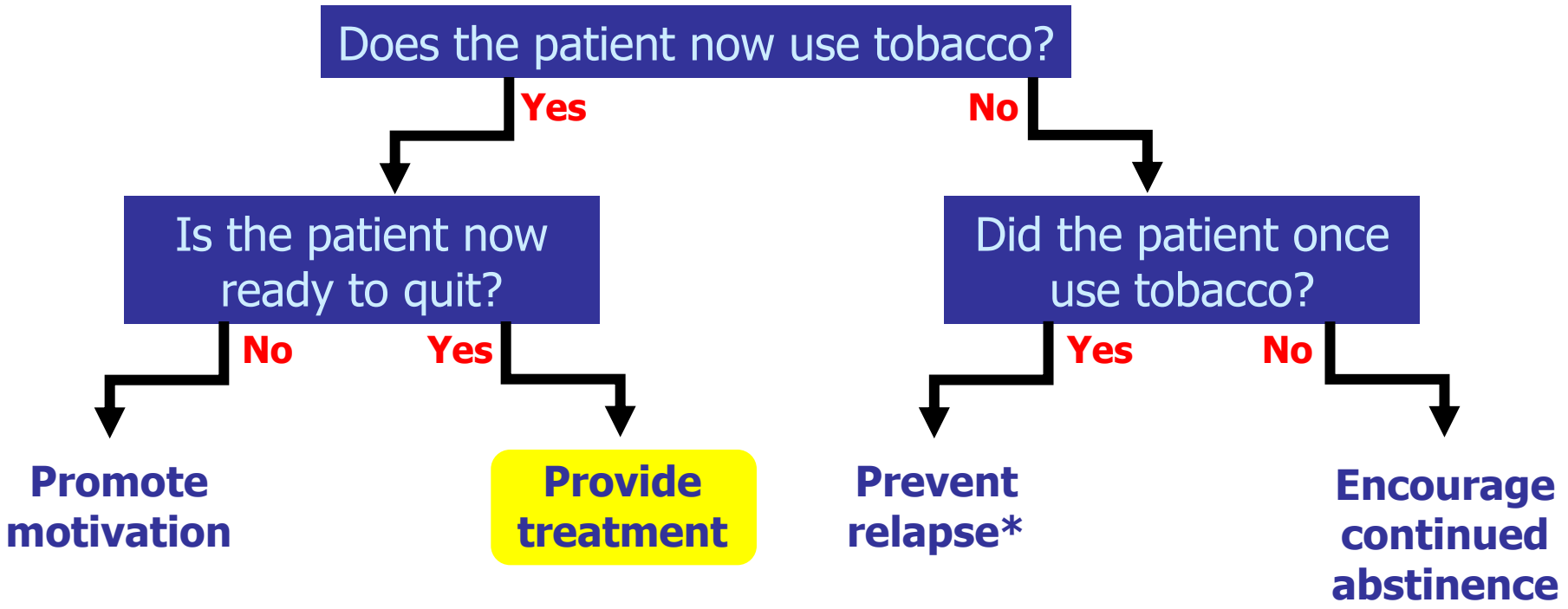
Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.* Rockville, MD: USDHHS, PHS, May 2008.

RAISING AWARENESS: TOBACCO USE MOOD LOG

- Use the Mood Log to raise patients' awareness of their tobacco use
- For each day, patient should record # of cigarettes smoked, # of pleasant activities, and provide a mood rating.
- Review log sheets with patient to identify relationship between smoking, activities / isolation, and mood

Is patient's tobacco use associated with isolation and poorer mood?

ASSIST: TAILOR TREATMENT to PATIENTS' READINESS to QUIT



*Relapse prevention interventions not necessary if patient has not used tobacco for many years and is not at risk for re-initiation.

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TOBACCO DEPENDENCE: A 2-PART PROBLEM

Tobacco Dependence

Physiological		**Behavioral**
The addiction to nicotine	↔	The habit of using tobacco
↓ Treatment		↓ Treatment
Medications for cessation		Behavior change program

Treatment should address the physiological **and** the behavioral aspects of dependence.

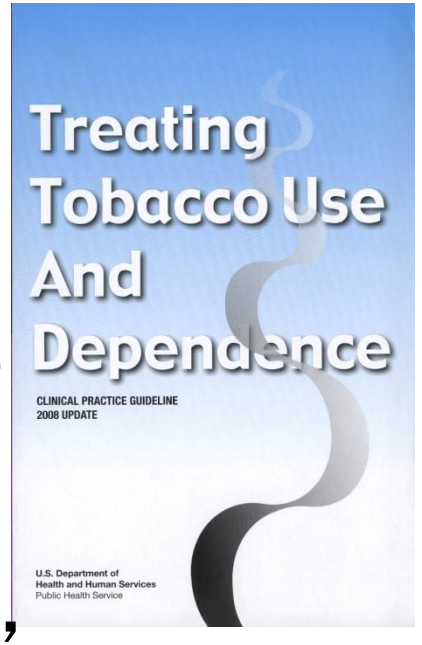
PHARMACOLOGIC METHODS: FIRST-LINE THERAPIES

Three general classes of FDA-approved drugs for smoking cessation:

- Nicotine replacement therapy (NRT)
  - Nicotine gum, patch, lozenge, nasal spray, inhaler
- Psychotropics
  - Sustained-release bupropion
- Partial nicotinic receptor agonist
  - Varenicline

PHARMACOTHERAPY

"Clinicians should encourage all patients attempting to quit to use effective medications for tobacco dependence treatment, except where contraindicated or for specific populations* for which there is insufficient evidence of effectiveness."



** Includes pregnant women, smokeless tobacco users, light smokers, and adolescents.*

Medications significantly improve success rates.

Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.* Rockville, MD: USDHHS, PHS, May 2008.

US TOBACCO TREATMENT CLINICAL PRACTICE GUIDELINES

- Literature base of more than 8,700 research articles
- < 30 randomized clinical trials treating tobacco dependence in smokers with mental illness or addictive disorders

Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update.*

TREATING TOBACCO DEPENDENCE in DEPRESSED SMOKERS

322 depressed smokers recruited from four outpatient psychiatry clinics

Stepped Care Intervention

Stage-based expert system counseling

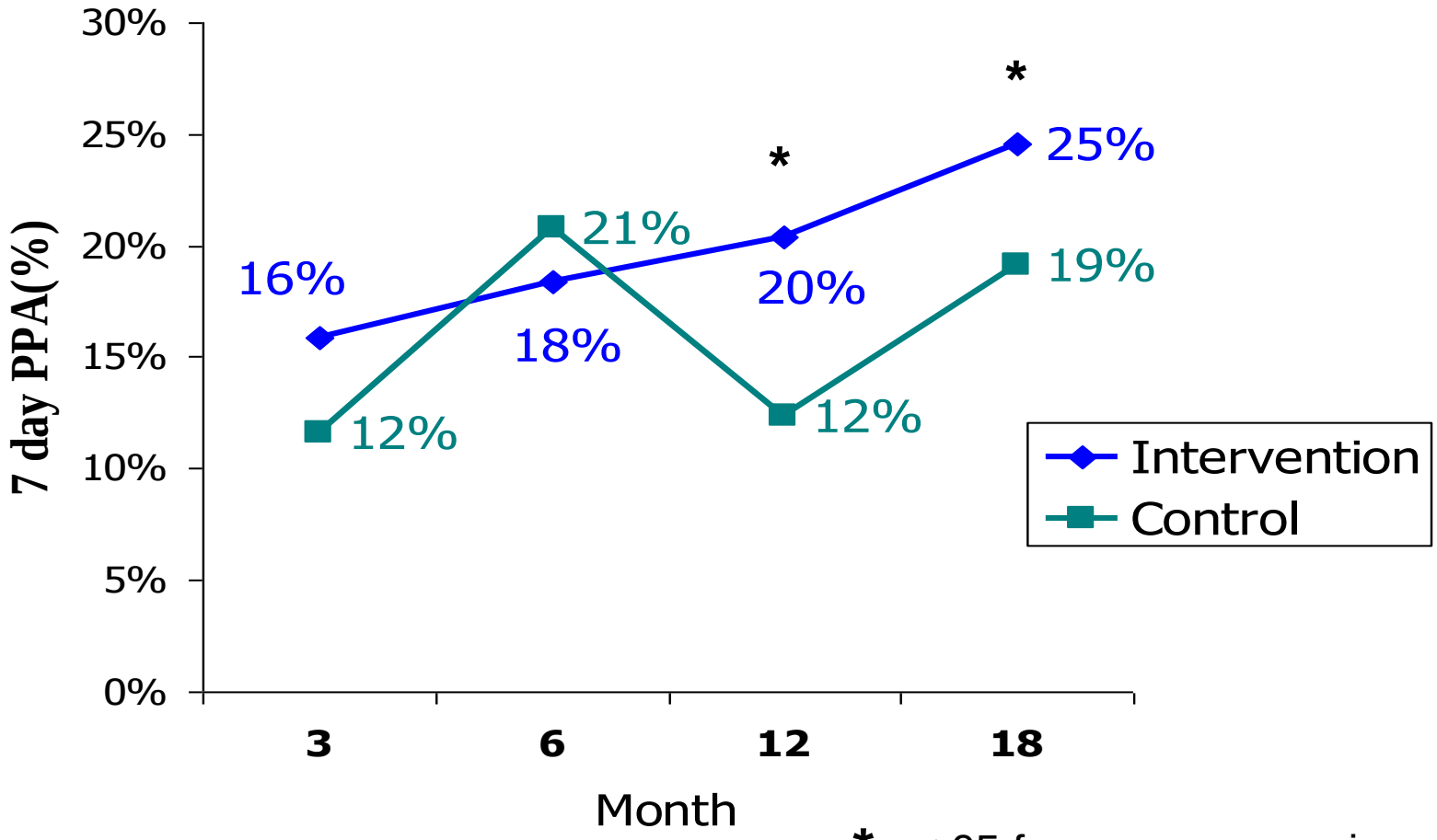
Nicotine patch

6 session individual counseling

Brief Contact Control

Hall et al., 2006. Am J Public Health

ABSTINENCE RATES by TREATMENT CONDITION



* p<.05 for group comparison

DEPRESSION SEVERITY & TOBACCO TREATMENT OUTCOME

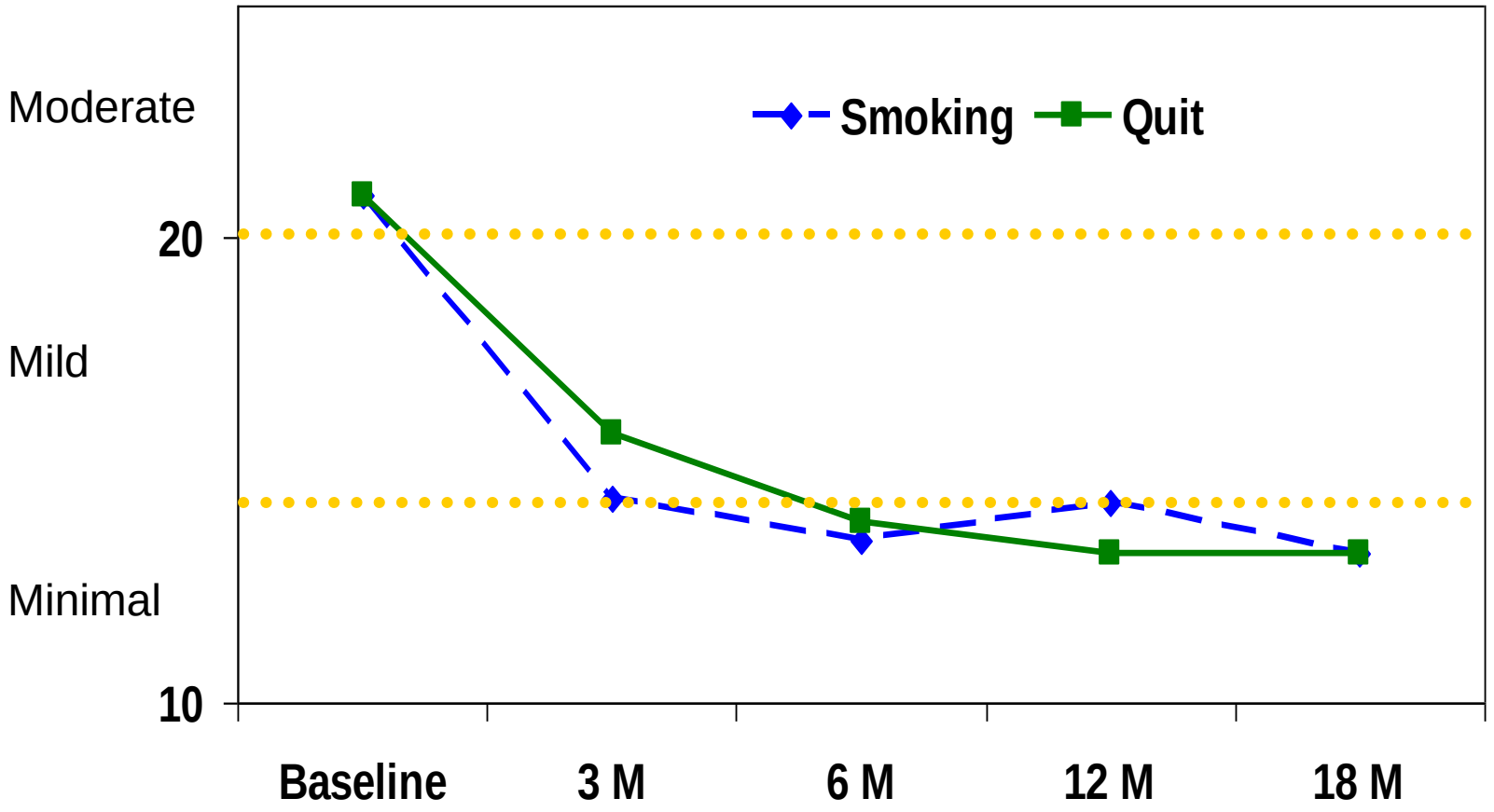
- **NO** RELATIONSHIP
  - Depression severity, as measured by the Beck Depression Inventory-II, was unrelated to participants' likelihood of quitting smoking
  - Among intervention participants, depression severity was unrelated to their likelihood of accepting cessation counseling and nicotine patch

MENTAL HEALTH OUTCOMES: DEPRESSED SMOKERS TREATED for TOBACCO

- Among depressed patients who quit smoking:
  - No increase in suicidality
    - Quit: 0% vs Smoking: 1-4%
  - No increase in psych hospitalization
    - Quit: 0-1% vs. Smoking: 2-3%
  - Comparable improvement in % of days with emotional problems
  - No difference in use of marijuana, stimulants or opiates
  - Less alcohol use among those who quit smoking

Prochaska et al., 2008, Am J Public Health

BDI TOTAL SCORE



TREATING DEPRESSED SMOKERS

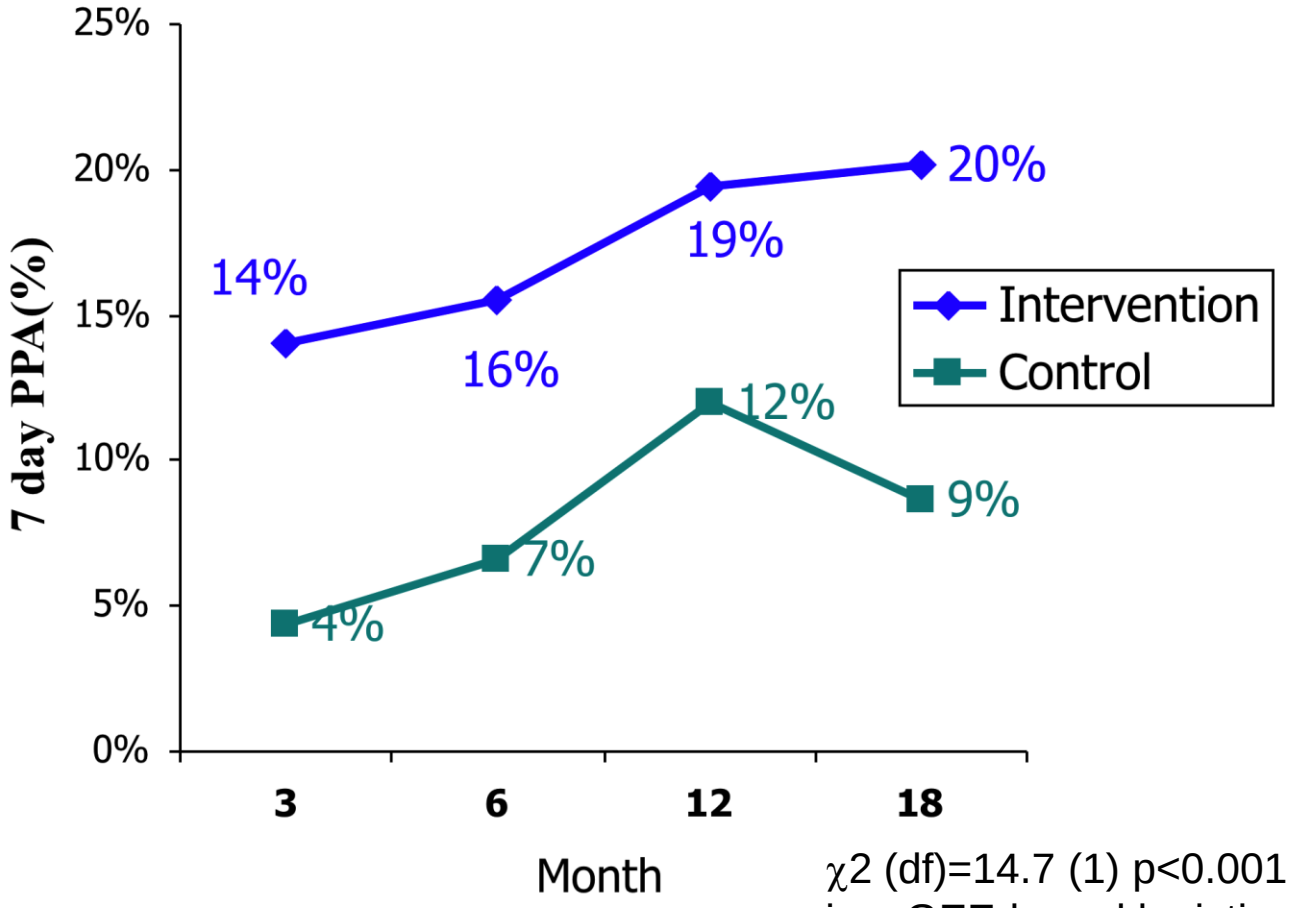
- Stage-based tobacco treatment with CBT and NRT significant effects at 12 and 18 months
- No evidence of worsened psychiatric symptoms associated with quitting smoking
- Smoking can be treated concurrent with depression without adverse effects to mental health functioning

TREATING TOBACCO USE in INPATIENT PSYCHIATRY

- 100% smoke-free unit
- Stage-tailored expert system, stage-tailored manual, 10 wk nicotine patch vs. Usual care
- 224 patients enrolled
- Full range of psychiatric diagnoses
- 79% recruitment rate
- 82% retention at 18 months

PI: Prochaska, NIDA K23 DA018691

ABSTINENCE RATES by TREATMENT CONDITION



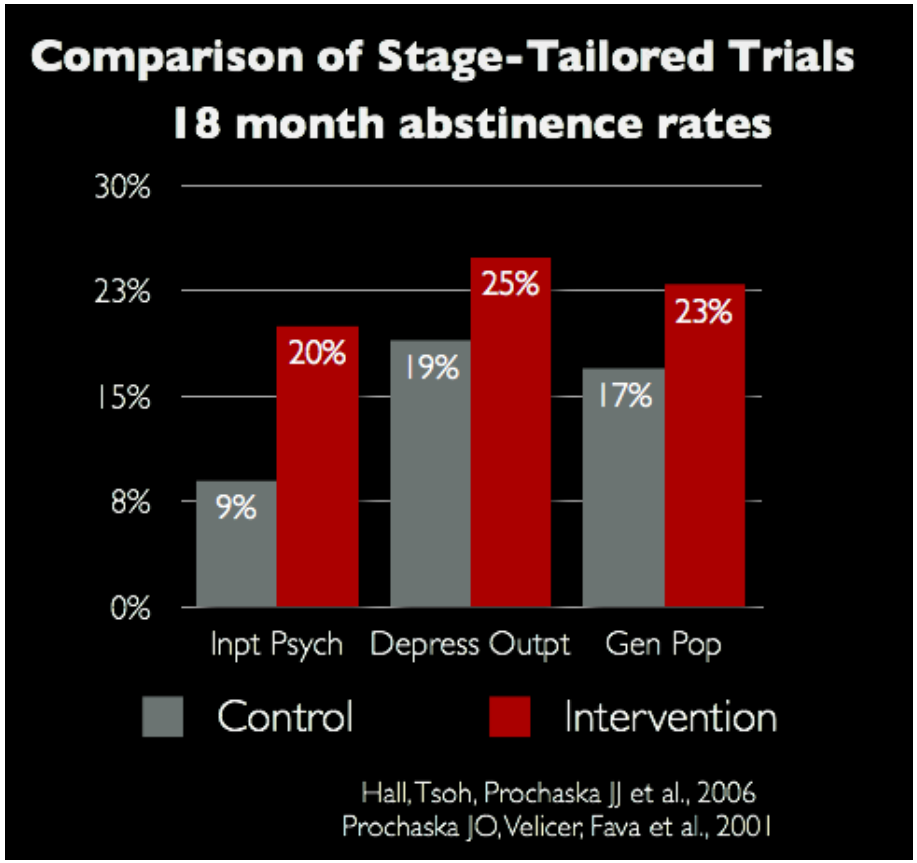
$\chi 2$ (df)=14.7 (1) p<0.001 for condition in a GEE-based logistic regression

IMPACT on MENTAL HEALTH SERVICE UTILIZATION

- 46% psychiatric re-hospitalization rate
  - CA data: 44% psychiatric re-hospitalization rate
- 232 Re-hospitalizations:
  - Unrelated to quit status
  - Related to African American race, psychosis symptoms at baseline, lower income, prior psych hospitalizations & treatment condition
  - Significantly greater for control (138) than treatment (94) participants, p=.032

TREATING DEPRESSED OUTPATIENTS & PSYCHIATRIC INPATIENTS

- The 18-mo quit rates and pattern of increasing abstinence rates over time are consistent with previous evaluations of staged-care interventions in the general population

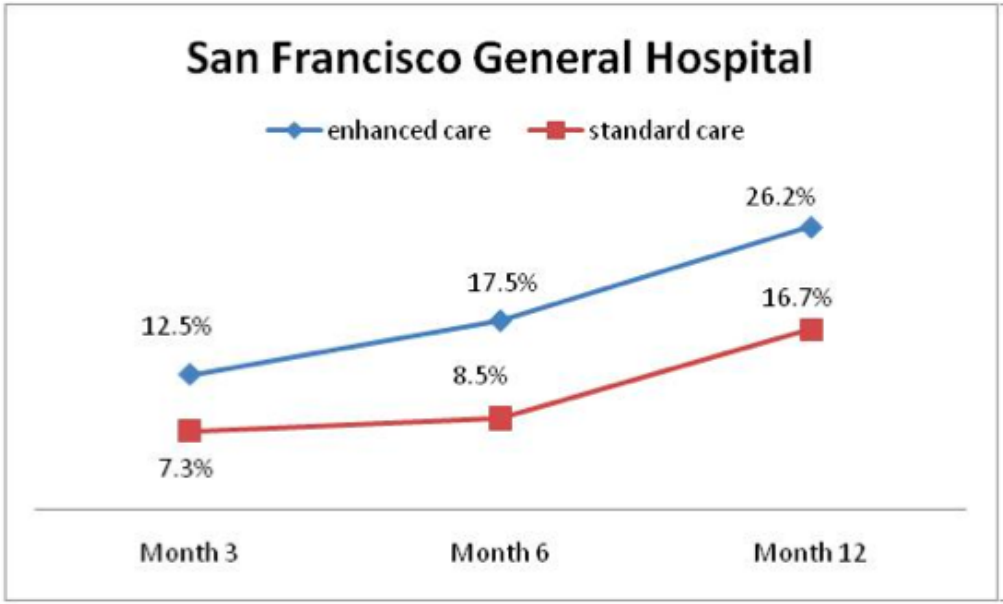


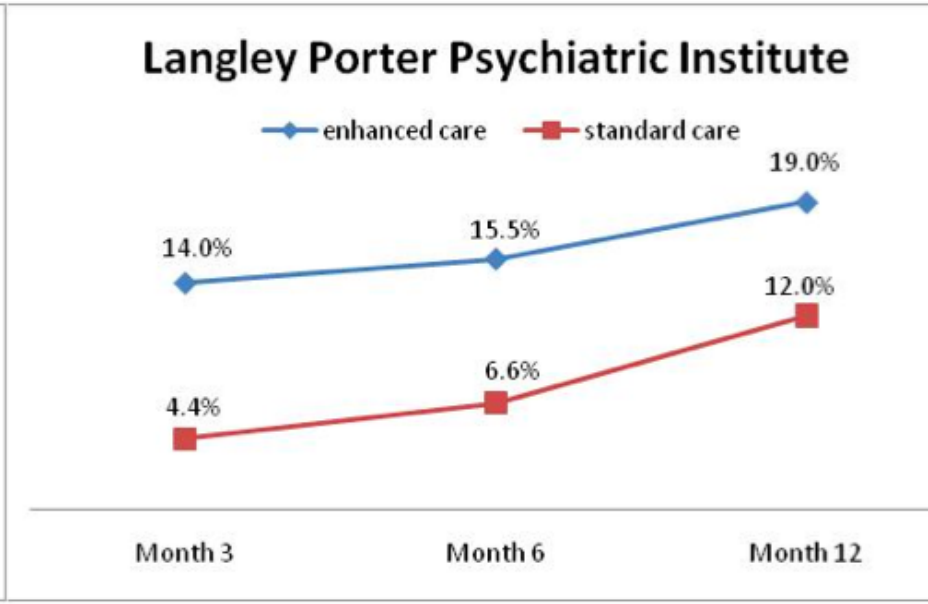
URBAN PUBLIC HOSPITAL: INPATIENT PSYCHIATRY

	LPPI	SFGH
N	224	100
Recruitment Rate	79%	71%
Age in years	40 (14)	40 (11)
Female	40%	35%
Ethnicity		
White	63%	**44%**
African American	9%	**27%**
Hispanic	5%	**9%**
Asian American	7%	**11%**
Multiethnic/other	16%	**9%**
Education in years	14 (3)	13 (3)
Income <$20,000	60%	**81%**
Homeless	5%	**39%**
Private/self-pay	53%	**1%**

CESSATION OUTCOMES

CO-confirmed 7 day PPA overtime by conditions





TREATING SMOKERS with SCHIZOPHRENIA

- Treatments tailored for smokers with schizophrenia no more effective than standard programs (George et al., 2000)

- Atypical antipsychotics associated with greater cessation than typical antipsychotics

2 META-ANALYSES of BUPROPRION FOR QUITTING SMOKING in PERSONS with SCHIZOPHRENIA

- 6 RCTs, N = 260 total (19 – 59)
- EOT: RR = 2.57 (95% CI 1.35, 4.88)
- 6 mo FU: RR = 2.78 (95% CI 1.02, 7.58)
- Gen Pop: RR = 1.69 (95% CI 1.53, 1.85)

Tsoi et al. (2010) Cochrane Lib; Banham & Gilbody (2010) Addiction

Bupropion for quitting smoking found to be well tolerated in patients with schizophrenia who are stabilized on an adequate antipsychotic regime

VARENICLINE USE with INDIVIDUALS with SCHIZOPHRENIA

- Evins et al. (2008): Open-label case series reported 13 of 19 patients (68%) with schizophrenia quit smoking at the end of treatment

- Two RCTs in process of varenicline use in individuals with schizophrenia (Pfizer & NIDA)

FDA BOXED WARNINGS

- On July 1, 2009, varenicline and bupropion received Boxed Warnings concerning the risk of serious neuropsychiatric symptoms:
  - *Patients should be advised to stop taking varenicline or bupropion and to contact a health-care provider immediately if they experience agitation, depressed mood, and any changes in behavior that are not typical of nicotine withdrawal, or if they experience suicidal thoughts or behavior.*

TOBACCO CESSATION & SCHIZOPHRENIA SYMPTOMS

- Tobacco abstinence (1-wk) **not** associated with worsening of:
  - attention, verbal learning/memory, working memory, or executive function/inhibition, or clinical symptoms of schizophrenia (Evins et al., 2005)
- Bupropion: decreased the negative symptoms of schizophrenia (Evins et al. 2005, George et al. 2002)
- Varenicline: no worsening of clinical symptoms and a trend toward improved cognitive function (Evins et al., 2009)

IN the ABSENCE of TIME or EXPERTISE: REFER

- **REFER** patients to other resources:
  - A doctor, nurse, pharmacist, or other clinician, for additional counseling
  - Local program
  - The support program provided free with each smoking cessation medication
  - Web sites like smokefree.gov or quitnet.org
  - The toll-free national quit line: 1-800-QUIT-NOW

QUITLINES

- Referring patients to a toll-free quit line is simple and easily integrated into routine patient care
- CA Quitline: nearly 1 in 4 callers met criteria for current major depression
- Those with depression much less likely to be quit 2-months later (18.5%) than callers without depression (28.4%)

Hebert et al. (2011) Am J Prev Med

INTEGRATING TOBACCO TREATMENT within PTSD SERVICES

- RCT with 66 clients from VA Medical Center
- Integrated care (IC)
  - Manualized treatment delivered by PTSD clinician and case manager (3-hr training)
  - Behavioral counseling once a week for 5 weeks + 1 follow-up
  - Bupropion, nicotine patch, gum, spray
- Usual care (UC): referral to VA smoking cessation clinic

McFall et al. (2005) Am J Psychiatry

INTEGRATING TOBACCO TREATMENT within PTSD SERVICES

- Cessation Medication Use
  - Integrated Intervention: 94%
  - Usual Care: 64%
- Counseling Sessions Attended
  - Integrated Intervention: M=5.5
  - Usual Care: M=2.6
- At all assessments, the odds of abstinence were **5 times greater** for integrated care vs. usual care

McFall et al. (2005) Am J Psychiatry

INTEGRATING TOBACCO TREATMENT within PTSD SERVICES

- Multi-site RCT with 943 clients from 10 VA Medical Centers
- Integrated care (IC) vs. Usual care (UC)
- Cessation outcomes: 2-fold increase in quitting
  - 6-mo 7 day PPA: IC 16.5% vs. UC 7.2%
  - 18-mo 7 day PPA: IC 18.2% vs. UC 10.8%
- Strongest predictor of tx effect: # of counseling sessions received
- Quitting had no detriment on PTSD symptoms

McFall et al. (2010) JAMA

SUMMARY: TOBACCO TREATMENT in PSYCHIATRIC PATIENTS

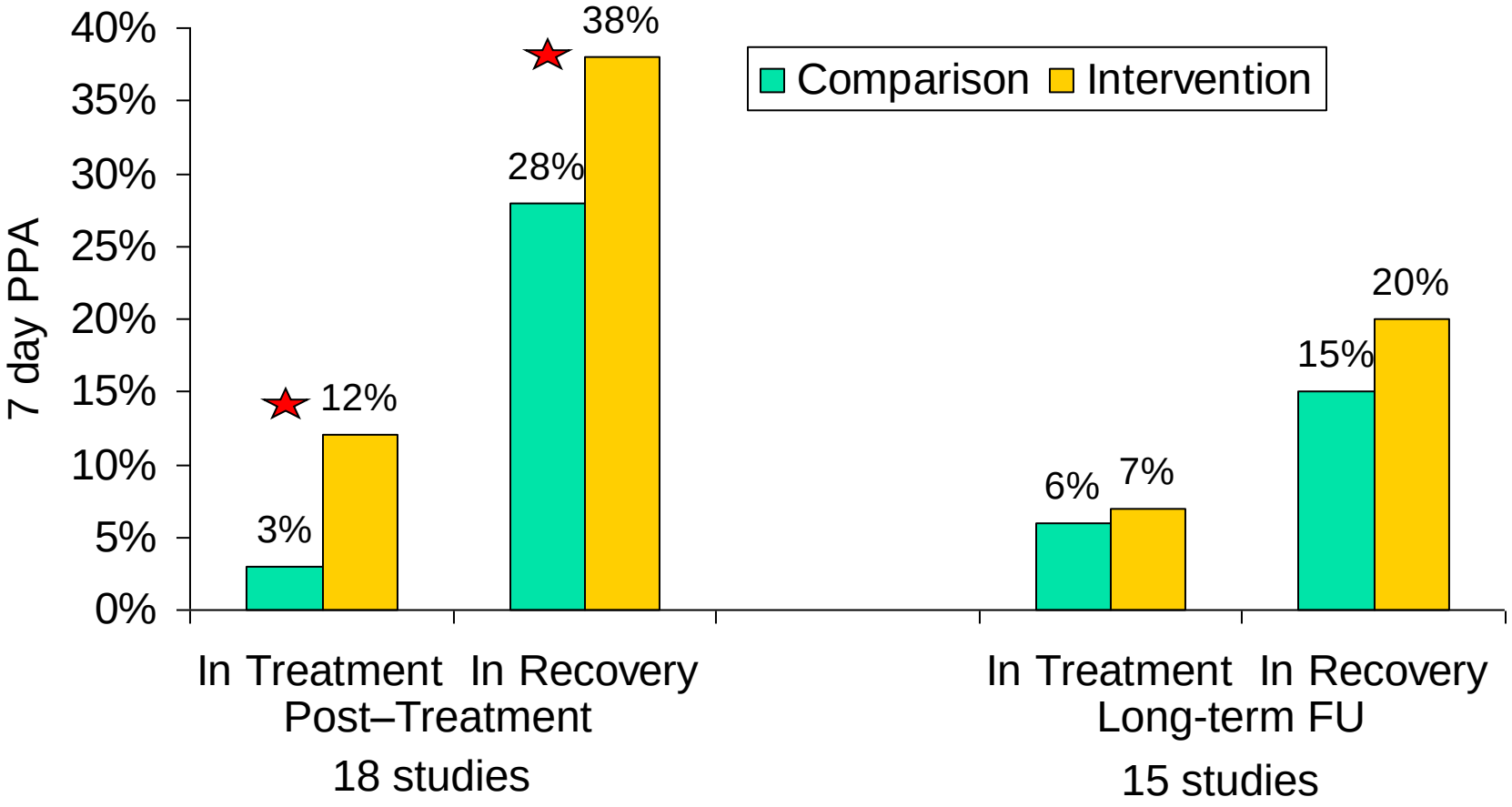
- In general, currently available interventions show effectiveness
- Wide range of abstinence rates, with unknown determinants
- Evidence of deleterious effect on psychiatric symptoms or recurrence is weak
- Integration into mental health treatment settings increases abstinence rates

TOBACCO CESSATION DURING ADDICTIONS TREATMENT or RECOVERY

- Meta-analysis of 19 trials
  - 12 in treatment; 7 in recovery
- Findings: Tobacco Cessation
  - In Treatment Studies: Post treatment abstinence rates were intervention=12% vs. control=3%
  - In Recovery Studies: Post treatment abstinence rates were intervention=38% vs. control=22%
  - No significant effect for tobacco cessation at long-term follow-up (≥ 6 months)

Prochaska, Delucchi & Hall (2004) JCCP

OVERALL SMOKING CESSATION RATES



DOES ABSTINENCE from TOBACCO CAUSE RELAPSE to ALCOHOL and ILLICIT DRUGS ?

- At ≥ 6 months follow-up, tobacco treatment with individuals in addictions treatment was associated with a 25% **increased** abstinence from alcohol and illicit drugs (Prochaska et al., 2004).

- Caveat: One well done study (N=499) of concurrent versus delayed treatment reported (Joseph et al., 2004):
  - Comparable smoking abstinence rates at 18 months (12.4% versus 13.7%)
  - Lower 6-month prolonged alcohol abstinence rates among those offered concurrent compared to delayed tobacco cessation treatment; NS at 12 and 18-months

TOBACCO CESSATION DURING ADDICTIONS TREATMENT or RECOVERY

- Systematic review of 17 studies
- Smokers with current and past alcohol problems:
  - More nicotine dependent
  - Less likely to quit in their lifetime
  - As able to quit smoking as individuals with no alcohol problems

Hughes & Kalman (2006) Drug Alc Dep

SUMMARY: TOBACCO TREATMENT for SUBSTANCE ABUSING PATIENTS

- In general, currently available interventions show some effectiveness, at least for the short-term
- Range of abstinence rates, with unknown determinants
- Weak evidence of deleterious effect on abstinence from illicit drugs and alcohol
- Disorder specific data may eventually allow better tailoring of treatments

PREVENTION

- Drug Abuse Treatment Settings
  - Prospective study, N=649
    - At 12-month follow-up, 13% of the 395 baseline smokers reported quitting smoking and 12% of the 254 baseline nonsmokers reported starting/relapsing to smoking

Kohn et al. (2003) Drug Alc Dep

MAKE a COMMITMENT…

Address tobacco use with all patients.

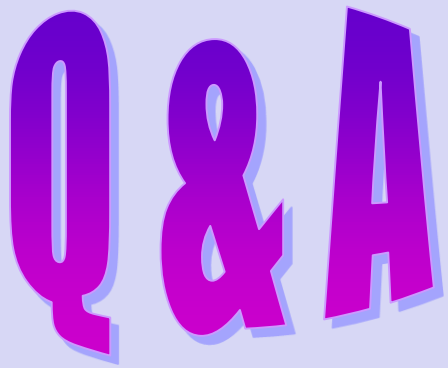
At a minimum, commit to incorporating brief tobacco interventions as part of routine patient care:

Ask, Advise, and Refer.

Become an advocate for smoke-free hospitals and clinics, workplaces, and public places.

ACKNOWLEDGEMENTS

- Karen Hudmon, DrPH, RPh and *Rx for Change*
- Sharon Hall, PhD & UCSF Habit Abatement Clinic
- Grant funding:
  - California Tobacco Related Disease Research Program (#13KT-0152, #17RT-0077)
  - National Institute on Drug Abuse (#K23 DA018691, #P50 DA09253)
  - National Institute of Mental Health (#R01 MH083684)
  - American Cancer Society (IRG# AC-08-04)
  - Pfizer, Inc. Investigator Initiated Research Award



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